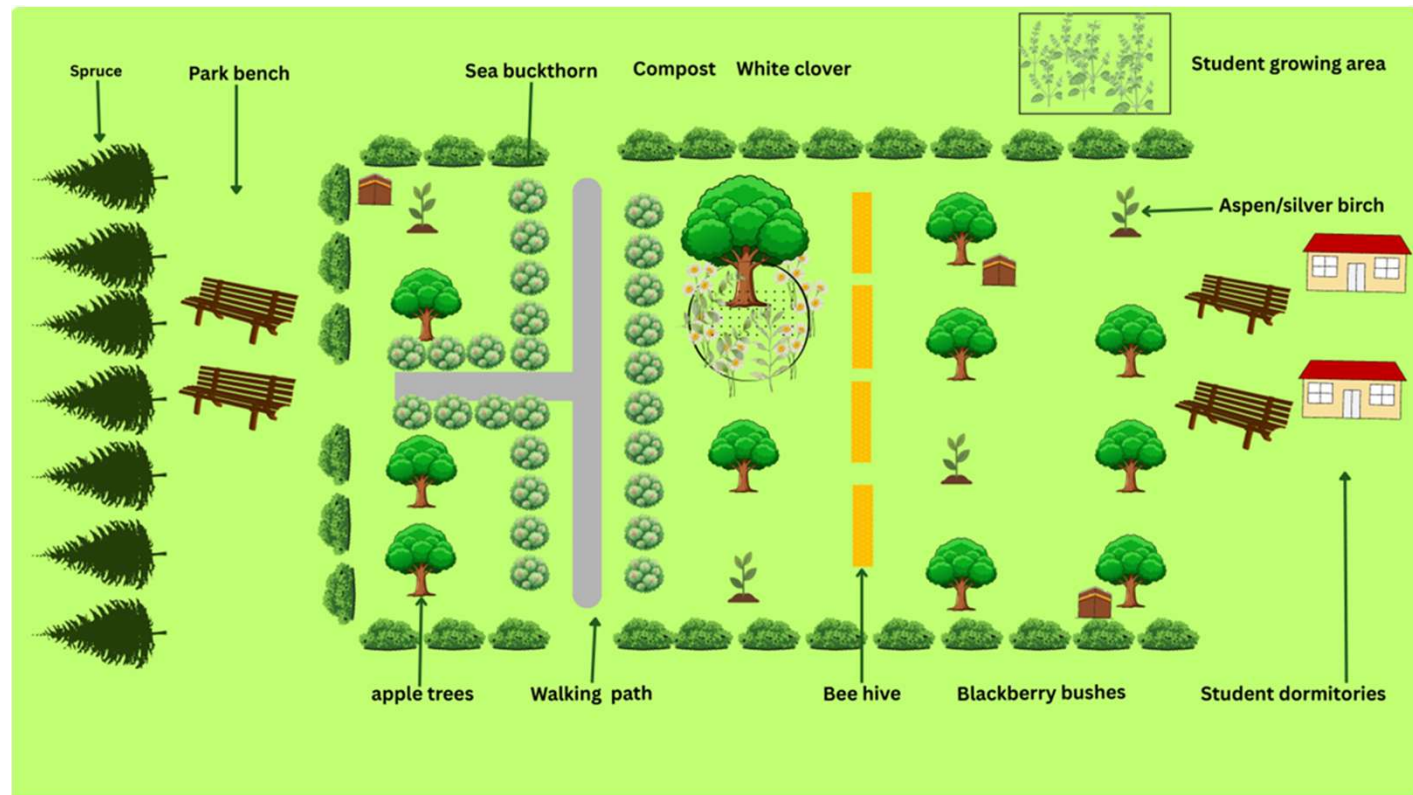


# Apple Garden

- Design integrating fruit trees, shrubs, ground cover, Medicinal plants pollinators, and student spaces
- Apple, sea buckthorn, blackberry, and white clover to support production and biodiversity
- Bee hives, compost system, walking paths, and benches for sustainability and learning
- Insect hotels: small wooden structures made from natural materials

**Time Frame:** Planning (0–1 months)  
→ Site preparation (1–4 months) →  
Installation (4–10 months) →  
Monitoring (10–22 months) →  
Learning & research (22–56 months)



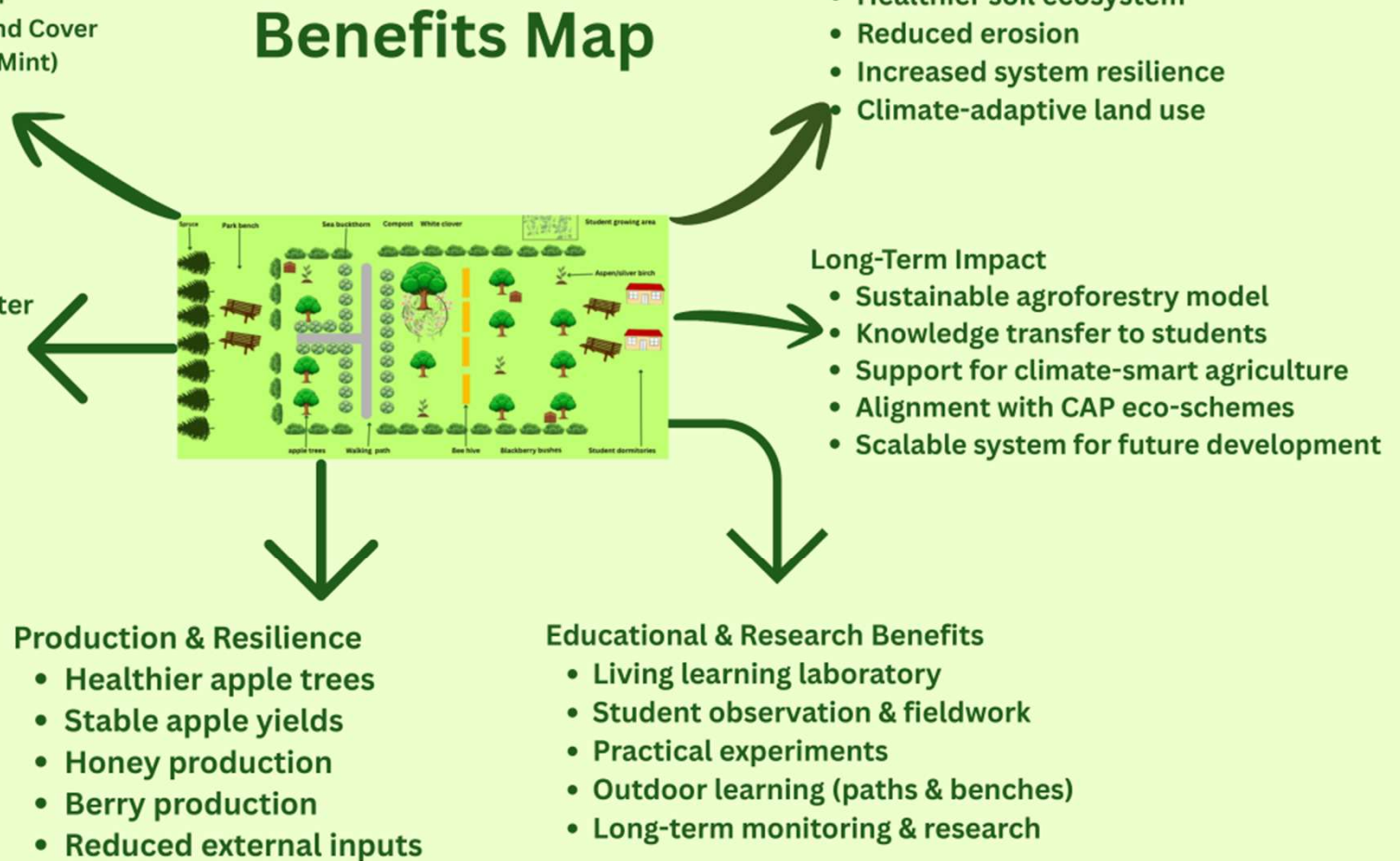
# Apple Garden – Beneficial Flow Diagram

## Core System

- Existing Apple Trees
- Selective Aspen & Silver Birch
- Shrubs, Sea Buckthorn, Ground Cover
- Medicinal Plants (Calendula, Mint)
- Compost & Mulch
- Insect Hotels & Bee Hives

## Ecological Processes

- Improved soil structure
- Increased soil organic matter
- Better moisture retention
- Light wind protection
- Enhanced pollination
- Natural pest regulation



## Environmental Benefits

- Higher biodiversity (plants, insects, birds)
- Healthier soil ecosystem
- Reduced erosion
- Increased system resilience
- Climate-adaptive land use

## Long-Term Impact

- Sustainable agroforestry model
- Knowledge transfer to students
- Support for climate-smart agriculture
- Alignment with CAP eco-schemes
- Scalable system for future development

## Production & Resilience

- Healthier apple trees
- Stable apple yields
- Honey production
- Berry production
- Reduced external inputs

## Educational & Research Benefits

- Living learning laboratory
- Student observation & fieldwork
- Practical experiments
- Outdoor learning (paths & benches)
- Long-term monitoring & research

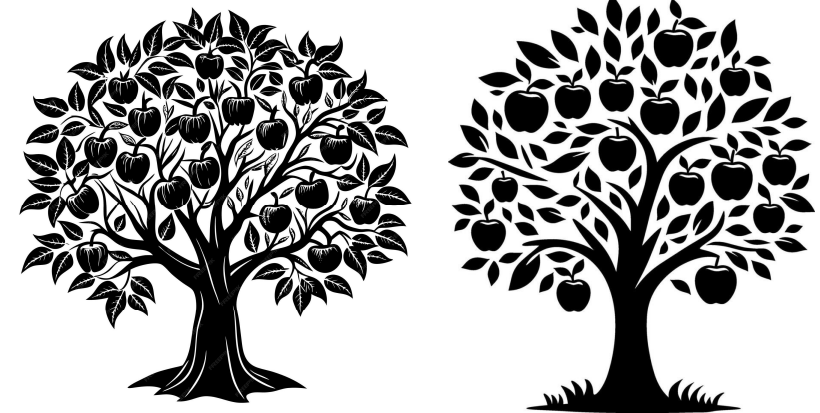
# Financing

## Expenses

- Replacement apple trees (2–4)
- Aspen & silver birch (selective)
- Shrubs, sea buckthorn, ground cover
- Medicinal plants
- Compost & mulch
- Paths & benches
- Insect hotels
- Bee hives (2)
- Installation & supervision

## Possible Financing

- CAP eco-scheme support
- Leader Programme (rural development funding programme of the European union)



Effective working hours (%)	84 %		
Indirect employee costs (%)	53 %		
Other costs include VAT:	YES		
<b>Salaries (e.g.)</b>			
	months	salary €/month	Salary in total €
Person 1			0
Person 2	6,0		0
	8,0		0
	5,0		0
	2,0		0
	2,0		0
	2,0		0
	8,0	1 700	13 600
			0
SUM			13 600
Salaries, total (effective)	Salary sum*effective working hours		11 424,00
Indirect employee costs	salaries*indirect employee costs		6 028,44
Personnel costs in total			
<b>Other costs</b>			
Materials			4 000
Equipment			2 500
Services			1 700
Travel expenses			
Other costs			
<b>Other costs, total</b>			8 200
<b>Total costs</b>			25 652

Description	Cost					Income					Net year				
	year 1	year2	year3	year4	year5	year1	year2	year3	year4	yaer5	year1	year2	year3	year4	yaer5
Replacement apple trees (2-4)	400														
Aspen & silver birch (selective)	600														
Shrubs, sea buckthorn, ground cover	1200														
Medicinal plants	300														
Compost & mulch	1200														
Paths & benches	1200														
Insect hotels	400														
Bee hives (2)	1200														
Installation & supervision	1700														
CAP eco-scheme support						5000									
<b>Total</b>	<b>8200</b>					<b>5000</b>									
Plant care & replacement		400													
Soil improvement & mulch		600													
Maintenance labour		1200													
CAP annual support							3500								
Pruning & care		1200													
Bee hive care		300													
CAP annual support															
<b>Total</b>		<b>3700</b>					<b>3500</b>								
Apple yield								1200							
Honey								600							
Sea buckthorn berries								500							
Annual maintenance			1500												
CAP annual support								3500							
<b>Total</b>			<b>1500</b>					<b>5800</b>							<b>4300</b>
Apple yield										2000					
Honey				900											
Sea buckthorn berries										700					
Annual maintenance				1700											
CAP annual support										3500					
<b>Total</b>				<b>2600</b>						<b>6200</b>					<b>3600</b>
Apple yield											2800				
Honey											1100				
Sea buckthorn berries											900				
Student projects & learning activities											600				
Annual maintenance					1800										
CAP annual support											3500				
<b>Total</b>					<b>1800</b>						<b>8900</b>				<b>7100</b>